

## **Hercules Stop**

### **# 25 Power and Danger**

On her delivery voyage, *Hercules* towed her sister tug *Goliah* 13,500 miles from Camden, New Jersey to San Francisco. It took power and strength to do a job like this. But in this one act, *Hercules* proved that she and the propulsion system inside of her could accomplish practically any tow. However, with such great power also comes danger.

At the heart of this system is a 500 horse power triple expansion steam engine. Of the two crewmen normally on duty in the engine room, one of them had the responsibility of oiling all the moving parts. Imagine the dangers of this work while at sea in a storm! With the deck heaving beneath your feet and the engine hissing and clanking at full power you reach in between the flashing and churning engine parts to add the right amount of oil to wherever it is needed. "Don't slip!" you say to yourself. In fact, one manual you had read warned, "...for many fingers have been lost doing this job." In this case you are worried about more than just your fingers.

Forward of the engine room deep within *Hercules*' belly is the boiler room. In this room stands a 14 foot tall scotch fire tube boiler. This boiler was the source of all of *Hercules*' strength, but like the engine it too offered danger. Although equipped with many safety devices, if improperly cared for it could become a potential bomb. With only one crewman at a time on duty, at night during a storm this job could be unnerving. Consider such a situation. With *Hercules* behaving like a roller coaster car on the waves and more light coming from the licking flames in the furnaces than the light bulbs, you would be working in an unstable world of flickering shadows. Steam gauges, water level gauges, and fuel temperature gauges must always be monitored and any adjustment to machinery instantly applied. Neglect could result in the eruption of a deadly steam explosion.

From her engine to boiler, with their potential of power and danger, the crew of the *Hercules* could not afford carelessness.